CALFED BAY-DELTA PROGRAM

STORAGE PROGRAM

PROGRAM PLAN YEAR 7

(STATE FY 2006-2007; FEDERAL FY 2007)

IMPLEMENTING AGENCIES:

Department of Water Resources
United States Bureau of Reclamation

JUNE 15, 2006

CALFED
BAY-DELTA
PROGRAM

Introduction

This Storage Program Plan identifies the CALFED Program activities that are scheduled to be completed during State Fiscal Year (FY) 2006-2007 and Federal FY 2007 (July 1, 2006 and September 30, 2007). The Plan also describes the accomplishments made during the previous year.

Readers familiar with past CALFED Program Plans will notice a difference between this plan and those prepared during previous years. The major variations are that the plan focuses on activities that will be undertaken in the upcoming year. Further, the plan does not contain the various sections found in previous plans such as "Performance Measures", "Integration of Science, Environmental Justice and Tribal Relations" and "Public Input and Outreach." However, a comprehensive discussion of the planned activities for the upcoming year can be found in the "Activity" section of this plan.

Priorities

The goal of the Storage Program is to increase water supply reliability, improve water quality, and support ecosystem restoration through expanded storage capacity and increased operational flexibility.

The CALFED Record of Decision (ROD) identified commitments to be met for surface and groundwater storage. Each of these commitments is being assessed individually as well as in coordination with one another to ensure consistent assumptions, review, and coordination with other CALFED Bay-Delta Program goals. DWR is working with local agencies and stakeholders to develop partnerships and provide assistance for planning and developing locally controlled and managed conjunctive use programs and projects and integrated regional water management. .

The ROD commitments fall into two broad categories: surface storage and groundwater storage/conjunctive management. In year 7 of the CALFED program these commitments for surface storage and for groundwater storage/conjunctive management are:

- Surface Storage priorities include: 1) priorities common to all surface storage projects, and 2) project specific priorities.

  Common Priorities--Priorities common to all surface storage projects include a few key steps. During these steps the projects will:

  Continue to advance the feasibility study process. Complete the pre-feasibility planning for surface storage projects in order to: 1) identify projects with the highest National and State economic benefits; and 2) narrow the range of alternatives in order to move forward to the final feasibility study, final environmental documentation, and financial feasibility analysis.

  Advancing the process will require working directly with potential participants to assess their needs and interests in specific surface storage projects, defining specific project alternatives that meet the needs of Federal, State, and local participants, and identifying specific public benefits that will be evaluated in more detailed studies. Through the feasibility study process, and particularly through the Common Assumptions effort described below, the Surface Storage program will examine opportunities to meet the goals and objectives of multiple CALFED programs.

Performance measures will be developed. The performance measures will be used to assess progress toward Program goals.

Surface Storage Project Specific Priorities--Project specific priorities include:

Shasta Lake Enlargement-- Reclamation is continuing with the feasibility study and National Environmental Policy Act (NEPA) process for the Shasta Lake Water Resources Investigation (SLWRI). Reclamation will formulate and evaluate detailed alternatives and prepare a Plan Formulation Report. The PFR describes the final alternatives and documents the process and rationale for their development, evaluation, and comparison. The PFR will provide details on costs, benefits, and potential effect of each complete alternative. Reclamation's findings on the potential environmental effects on the McCloud River associated with a Shasta Dam raise will be documented in the Federal feasibility report and environmental compliance documents.

Los Vaqueros Reservoir Expansion- Reclamation and Contra Costa Water District are continuing with the feasibility study and NEPA /California Environmental Quality Act (CEQA) process for the LVE Investigation. In order to complete the draft feasibility study by December 2006 and final feasibility study by December 2007, plan formulation activities will occur during the feasibility study process, but a separate Plan Formulation Report will not be prepared.

North-of-the-Delta Offstream Storage-- Reclamation and DWR are continuing with the feasibility study and National Environmental Policy Act (NEPA)/California Environmental Quality Act (CEQA) process for the NODOS Investigation. The Plan Formulation Study (PFS) is scheduled for completion in the fall 2007. The PFS will focus on the development and analysis of detailed alternatives and culminate in a Plan Formulation Report (PFR). The PFR will recommend the final array of alternatives that will be carried forward into the feasibility study. The PFR will evaluate costs, benefits, and potential effect of each alternative.

Upper San Joaquin River Storage - Reclamation and DWR are continuing with the feasibility study and NEPA/CEQA process for the Upper San Joaquin River Basin Storage Investigation. The Plan Formulation Report (PFR) is scheduled for public distribution in the Summer of 2007. The PFR will describe the final alternatives and document the process and rationale for their development, evaluation, and comparison. The PFR will provide details on costs, benefits, and potential effect of each complete alternative.

San Luis Reservoir Low Point Project-- Reclamation and DWR are continuing with a Plan of Study, Feasibility Study, and associated environmental analyses for the San Luis Reservoir Low Point Project. The primary purpose of the San Luis Reservoir Low Point Appraisal Study was to identify preliminary alternatives that would provide a federal interest for the project. The Appraisal Study identified initial alternatives for increasing reliability in the delivery of contract water from the San Luis Reservoir to the San Felipe Division of the Central Valley Project (CVP), and other member agencies of the San Luis

Delta Mendota Water Authority (SLDMWA) A Plan of Study identifying tasks to be completed in the Feasibility Study was drafted concurrently with the Appraisal Study. An Initial Alternatives Information Report (IAIR) is scheduled for March 2007. The IAIR will identify preliminary alternatives and document resource issues, opportunities, goals, objectives, criteria and constraints for the study.

- Groundwater Conjunctive Management Priorities include Projects with Total Capacity of 500 TAF to 1 MAF.

  The ROD target is to facilitate and fund locally supported, managed, and controlled groundwater and conjunctive use projects with a total of 500 TAF to 1 MAF of additional storage capacity by 2007. Progress toward this target is being assessed in terms of the capacity to deliver additional water with new projects, facilities, and operations, rather than just available storage. This is thought to be a better measure of the improvement in water supply reliability. Actions for Year 7 include completing implementation of the most promising projects and aggressively pursuing implementation of additional projects by the end of Stage 1.

  The ROD also identified the need for improving the effectiveness of groundwater management throughout the state. Effective monitoring and institutional structures are critical to the success of local and regional conjunctive management projects, as well as to other CALFED programs, such as water transfers and EWA. Passage of SB 1938 in 2002 provided new requirements for groundwater management plans (GMPs), and made the award of grant funding contingent on compliance. This incentive has led to the development or update of many GMPs in the state.

  In developing regional conjunctive management projects local agencies are considering proposals that will provide multiple project benefits.

Common Assumptions-Common Assumptions are embedded within the storage projects. The Common Assumptions effort assures that all projects are evaluated on a common basis, utilizing the same base assumptions for each project. For the purposes of this program plan, the Common Assumptions effort is discussed as a project under the Surface Storage Accomplishments and Activities sections.

The Common Assumptions team will continue to work on the development of the Feasibility Study Report Common Model Package (FSRCMP). The FSRCMP will include CALSIM III, DSM2, LCPSIM, CVPM, Sacramento River Temperature Model, State Water Project/Central Valley Project Power Modules, and a framework for integration of the models. The FSRCMP will assume implementation of other water management options (agricultural and urban water use conservation, water transfers, conjunctive use, recycling, desalination, and other local projects) in the future No-Action Alternative. The Common Assumptions team coordinates with the California Bay-Delta Authority's Year 4 Comprehensive Evaluation: CALFED Water Use Efficiency Element and the California Water Plan Update to generate estimates of the other water management options used in the future No-Action Alternative. The FSRCMP model package is scheduled to be completed in the summer of 2007, and it will be used to support the feasibility studies and environmental documentation for the surface storage investigations.

Accomplishments

Improvements in surface storage, groundwater management and construction of conjunctive use projects will benefit water supply reliability, the Environmental Water Account, ecosystem restoration, water transfers, and other CALFED programs.

Specific project accomplishments include:

Surface Storage

In Delta Storage-

Completed the Draft Supplemental Report to 2004 Draft State Feasibility Study In-Delta Storage Project.

Shasta Lake Enlargement-

Completed and released the Environmental Scoping Report in February 2006.

Completed field surveys and baseline for Habitat Evaluation Procedures (HEP).

Initiated Section 106 Process. Initiate record search and ethnographic studies.

Los Vaqueros Reservoir Expansion-

Completed an Initial Alternatives Information Report in Summer 2005.

Completed and released the Environmental Scoping Report in Spring 2006.

In order to make the schedule for a Draft Feasibility Study in December 2006, no separate Plan Formulation Report will be prepared as originally scheduled in Spring 2006.

North-of-the-Delta Offstream Storage-

Completed an Initial Alternatives Information Report in May 2006.

Complete an Administrative Draft Sacramento River Flow Regime Status Report and Evaluation in June 2006.

Continued the development by Reclamation of a suite of predictive models to evaluate the effects on geomorphology and physical river processes of the Sacramento River from NODOS operational alternatives.

Upper San Joaquin River Storage-

Initiated biological field surveys in Spring 2006.

Initiated cultural resource literature review of alternative sites.

Initiated geologic drilling and materials investigation program initiated in June 2006.

Reclamation, with support from DWR held a public meeting in Fresno in April 2005 for the Upper San Joaquin River Basin Storage Investigation to brief stakeholders on the progress of the investigation.

A Tribal briefing was held in July 2005.

The next public workshop is scheduled for fall 2006.

San Luis Reservoir Low Point Project--

Completed an Appraisal Study in April 2006

Developed and Initiated the Plan of Study in April 2006.

Continued public involvement and outreach activities with stakeholders.

Common Assumptions-

Completed the Plan Formulation Report Common Model Package in Spring 2006.

Groundwater Storage/Conjunctive Water Management

Improvements in groundwater management and construction of conjunctive use projects will benefit water supply reliability, the Environmental Water Account, ecosystem restoration, water transfers, and other CALFED programs.

Performance measures will be developed and used to assess progress toward Program goals.

Specific project accomplishments include:

Feasibility Study Grants –

Administered and provided oversight on previously funded Feasibility Study grants. A total of 129 Local Groundwater Management Assistance Act (AB 303) grants have been awarded funding and 61 are complete as of Year 6. A total of 28 feasibility studies/pilot projects were funded under Proposition 13, and 18 of the 28 projects are complete as of Year 6.

Technical Assistance to Locals –

Provided technical and financial assistance to existing local MOU agency partnerships to study the groundwater basins and assess opportunities for conjunctive and integrated regional water management.

Provided technical and financial assistance to local partners for assessing in-basin needs, project formulation, and commencement of pilot projects. Working to expand partnerships regionally and integrate additional water management elements into the planning process.

Provided technical and financial assistance to local partners for developing groundwater management plans to comply with SB 1938. To track progress in groundwater management, the number and location of GMPs throughout the state are being tracked; however, this is an imperfect measurement since local agencies are not required to submit the plans to DWR.

Provided independent facilitation/mediation services to local partners for improving stakeholder involvement, fostering local support for improved groundwater management, and for enhancing stakeholder understanding of local and regional water resource issues and needs.

Implementation Grants and Loans –

Provided oversight on the implementation of previously funded groundwater storage construction grants and loans. A total of 32 projects, having an estimated total projected capacity of over 300 TAF, have been awarded funding under Proposition 13 and 6 of the projects funded in the three cycles were completed in Year 6.

Activity

Surface Storage

The storage projects within the surface storage program are linked and coordinated through the Common Assumptions effort and regular interactions between the project teams at DWR and Reclamation.

Specific Surface Storage program activities are discussed below.

In Delta Storage –

In Delta Storage activities are suspended pending future funding. DWR completed the Draft Supplemental Report to 2004 Draft State Feasibility Study in-Delta Storage Project and recommends that further detailed study of the In-delta Storage project be suspended until a proposal is submitted by potential participants detailing their specific interests, needs and objectives that support reinitiation. However, limited economic study and operations modeling will continue through the Common Assumptions effort.

Shasta Lake Enlargement –

- Complete Plan Formulation Report by December 2006.
- Complete biological and physical surveys for environmental documentation.
- Continue Section 106 Process. Complete record search and continue ethnographic studies.
- Complete feasibility level engineering designs and cost estimates on dam, appurtenant structures, and relocations.
- Formulate, evaluate and compare alternatives using criteria consistent with Federal Principles and Guidelines and policies and performance measures to meet project objectives.
- Complete Plan Formulation Report.

Funding: FY 2007: $3.9 million proposed in President's FY 2007 Budget

Schedule: Complete Draft Feasibility Report and draft environmental documentation in Winter 2007

Complete Final Feasibility Report and final environmental documentation in Winter 2008

Published in ROD in Winter 2008

Detailed Design, Plans, Specifications and Permits Phase through Winter 2010

Public Involvement and Outreach: Continue public and stakeholder coordination and outreach

Los Vaqueros Reservoir Expansion –

- Complete biological and physical surveys for environmental documentation.
- Identify mitigation properties and costs.
- Continue Section 106 Process. Complete record search and continue ethnographic studies.
- Complete feasibility level engineering designs and cost estimates on dam, appurtenant structures, and relocations.
- Formulate, evaluate and compare alternatives using criteria consistent with Federal Principles and Guidelines and policies and performance measures to meet project objectives.
- Continue public and stakeholder coordination and outreach.
- Complete draft Feasibility Report and draft environmental documentation in December 2006

Funding: $2.98 million ($1.98 million proposed in the FY2007 President's Budget for Reclamation).

Schedule:
Complete final Feasibility Report and final environmental documentation in December 2007
Publish ROD in Spring 2008.

Public Involvement and Outreach: Ongoing

Challenge: The FY 2005 budget required the original LVE MOU be renewed by Bay Area Partners before State funds could be used in FY 2006. The MOU is currently being routed for signature.

North-of-the-Delta Offstream Storage –

- Complete a Plan Formulation Report in fall 2007
- Complete the development of a suite of predictive models to measure the effects of geomorphology and physical river processes due to NODOS operations in early 2007.
- Continue coordination with Indian Tribes in the NODOS study area.
- Continue cultural resources studies in association with Section 106 of the National Historic Preservation Act.

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Funding: FY2007: $4.6 million ($1.5 million proposed in the President's FY 2007 Budget for Reclamation).

Schedule: Complete a Plan Formulation Report in fall 2007
Complete draft Feasibility Report and draft NEPA/CEQA documents in spring 2008
Complete final Feasibility Report and final NEPA/CEQA documents in winter 2008

Public Involvement and Outreach: Ongoing

Potential Issue:
There has been considerable stakeholder interest to evaluate the potential effects on the flow regime of the Sacramento River associated with NODOS operations. In 2002, the NODOS Project Management Team

convened the Sacramento River Flow Regime Technical Advisory Group to help identify potential NODOS flow regime impacts and benefits as well as improve the general understanding of the flow regime of the upper Sacramento River and related ecosystem processes. Reclamation is developing a suite of models to evaluate the effects of geomorphology and physical river processes of the Sacramento River due to NODOS operations.

Upper San Joaquin River Storage–

- Complete the draft Plan Formulation Report
- Water Operations – further development on potential uses of new water supplies and identifying project benefits, including potential contributions to San Joaquin River restoration, improving San Joaquin River water quality, and facilitating conjunctive management and water exchanges that provide high-quality water to urban communities.
- Environmental Resources – identify how aquatic, botanic, wildlife, cultural, historic, and archeological resources in and around the potential reservoir area would be affected by the alternatives.
- Economics – identify monetary benefits related to changes in water delivery, groundwater pumping, water quality, flood damage reduction, hydropower generation, and recreation
- Groundwater Storage and Conjunctive Management – additional work is needed to develop specific conjunctive management and groundwater storage measures for inclusion in Investigation alternatives. Specific projects identified in a Conjunctive Management Opportunities Study, currently being completed by DWR, will be evaluated for inclusion in the Investigation.

Funding: FY2007: $5.0 million ($4.0 million proposed in the President's FY 2007 Budget for Reclamation).

Schedule:

Complete Plan Formulation Report in Summer 2007

Complete Draft Feasibility Study Report and draft environmental documentation in Summer 2008

Complete Final Feasibility Study Report and final environmental documentation in Summer 2009

Public Involvement and Outreach: Ongoing

San Luis Reservoir Low Point Project –

- Major activity includes work on the Initial Alternatives Information report scheduled for completion in December 2006.

Funding: FY2008: $1.49 million proposed in the President's FY 2007 Budget for Reclamation.

Schedule:

Complete the Initial Alternatives Information Report in March 2007
Complete the Plan Formulation Report in December 2007
Complete the Draft Feasibility Study Report and draft environmental documentation in March 2008
Complete the Final Feasibility Study Report and final environmental documentation in June 2009
Sign the Record of Decision in September 2009

Public Involvement and Outreach: Ongoing

Common Assumptions –

Complete the Feasibility Study Report Common Model Package.

Funding: $2 million ($800,000 proposed in the FY2007 President's Budget for Reclamation)

Schedule:

Complete the Feasibility Study Report Common Model Package in Summer 2007.

Public Involvement and Outreach: Ongoing

Groundwater Storage/Conjunctive Water Management

DWR will continue to provide assistance to local agencies for groundwater program development and conducting oversight on projects previously awarded funding through the grants and loans program.

Specific program activities include:

Feasibility Study Grants –

Continue to provide administration and oversight of feasibility study projects previously funded.

Funding: $0

Schedule: N/A

Potential Problems -
Funding has not been budgeted to DWR to provide oversight on projects previously awarded funding through the grants program. No additional feasibility study grants will be awarded. If additional funding is available, the grants program would continue to provide funding to local agencies to conduct feasibility studies.

Technical Assistance to Locals –

DWR will continue to work with local agencies to develop locally controlled and managed groundwater programs. In addition, DWR will continue to provide oversight on projects awarded funding through the grants and loans program. DWR is working with local agency partners to implement SB 1938, which placed requirements on groundwater management plans, most notably, an element of integrated regional water management coordination.

Funding: $6.806 million

Schedule: Ongoing
Under existing funding levels, DWR will provide assistance to local agencies to develop locally controlled and managed groundwater projects and programs providing local and regional benefits. DWR will work with local agencies to assist in developing more competitive proposals for future grant funding.

Public Involvement and Outreach:
Local agency advisory groups conducting basin wide planning and developing local and regional conjunctive water management programs will generally meet monthly or quarterly, depending upon the consensus of the stakeholders. These groups will include local governments, water agencies, environmental and business interests, and other interested parties.

The local planning processes for groundwater storage include tribal representation where applicable. As an example, in the Upper San Jacinto River Basins area, planning efforts will assist in a settlement between water agencies and the Soboba Band of Mission Indians, and tribal members are involved in the advisory committees.

Linkages with Other Elements:
The Conjunctive Water Management Program (CWMP) is funding and coordinating with the Water Science and Technology Board of the National Research Council on a study of "Sustainable Underground Storage of Recoverable Water." The Final Report is anticipated to be completed in Year 7 and will provide guidance to the State and local agencies in addressing scientific issues and limitations in the effective use of groundwater storage.

Groundwater Storage projects are leading to drinking water quality improvements, primarily in southern California.

Coordination with the EWA and WUE programs is ongoing with the groundwater storage programs.

Implementation Grants and Loans –

Continue to provide oversight on the implementation of previously funded groundwater storage construction grants and loans.

Funding: $0

Schedule: Ongoing
Local agencies, with DWR oversight, are implementing the most promising projects and aggressively pursuing implementation of additional projects by the end of Stage 1.

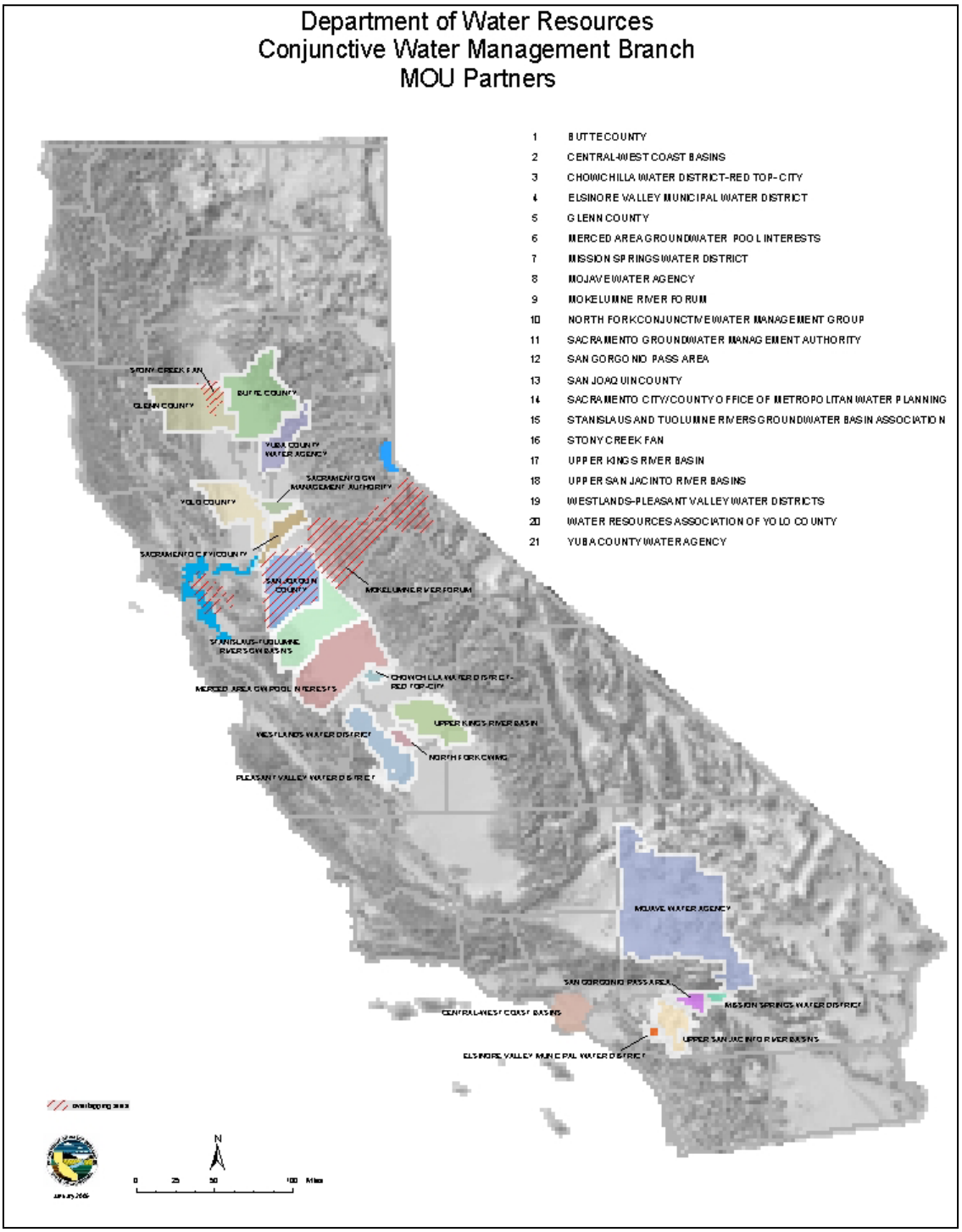
Public Involvement and Outreach: Ongoing

Linkages with other Elements:
CWMP will continue to coordinate with the Science Program in developing Performance Measures to assess feasibility studies and ability to implement the project, and in determining potential benefits and beneficiaries to ensure program consistency. Performance measure standards will consider criteria for completion and conclusions of feasibility studies conducted, economic efficiency, environmental benefits provided, water produced to meet local, regional, and statewide needs, and improvements in water quality.

Potential Problems:
If additional funding becomes available for grants and loans, the state will continue to provide funding to local agencies to construct conjunctive use projects to develop additional capacity to meet the targeted goal. Lacking such funding, the local implementation of new projects is expected to slow considerably. Full program funding will also allow DWR to continue working with local agencies to develop locally controlled and managed groundwater programs and provide oversight on projects awarded funding through the grants and loans program.

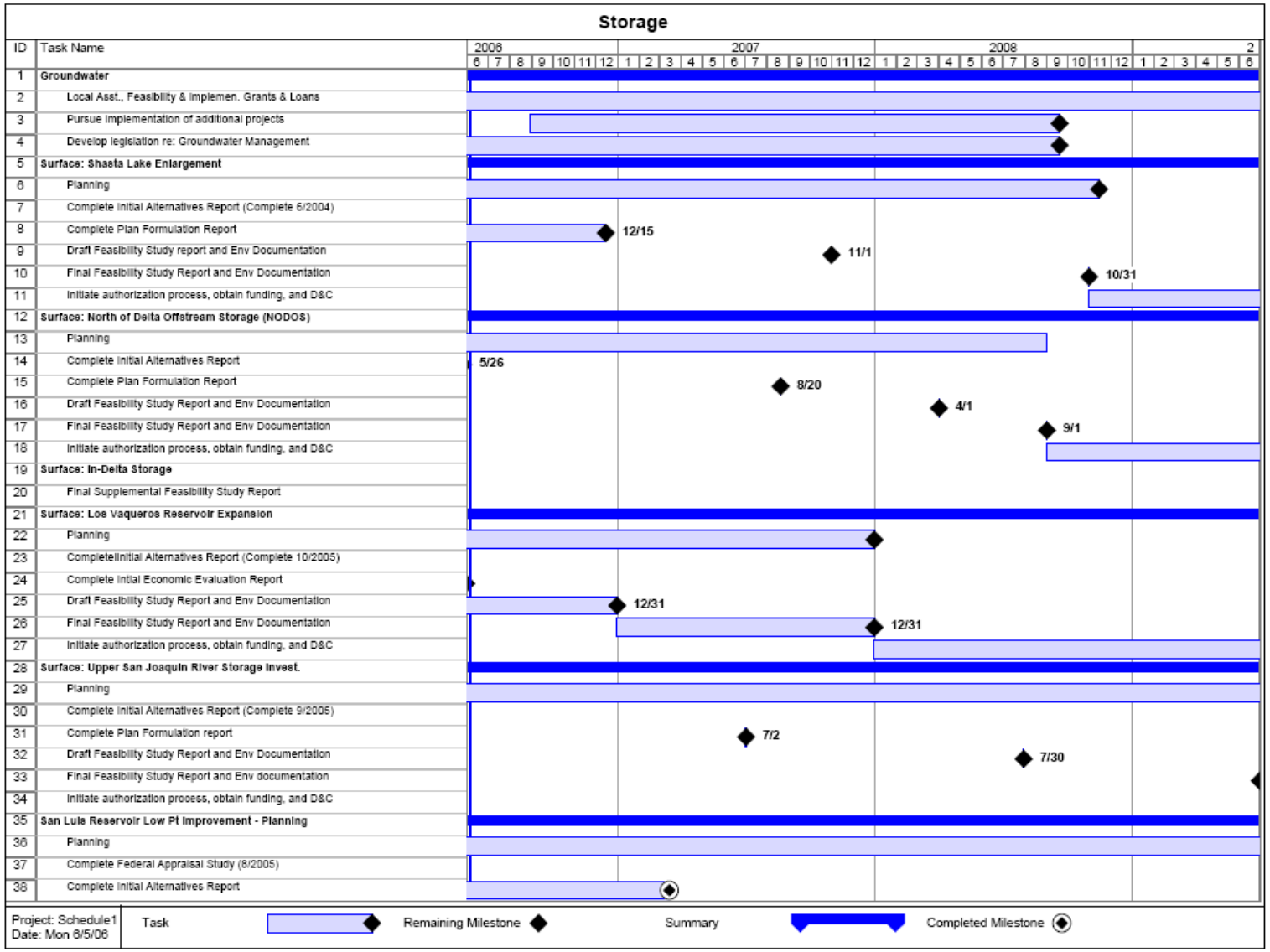
Under existing funding levels, DWR will provide assistance to local agencies for groundwater program development and conduct oversight on projects previously awarded funding through the grants and loans program. No additional grants or loans would be awarded specifically for conjunctive use facilities; however, such projects may be included in regional plans that compete for grant funding for integrated regional water management.

Geographical Distribution of Groundwater/Conjunctive Mgmt Activities

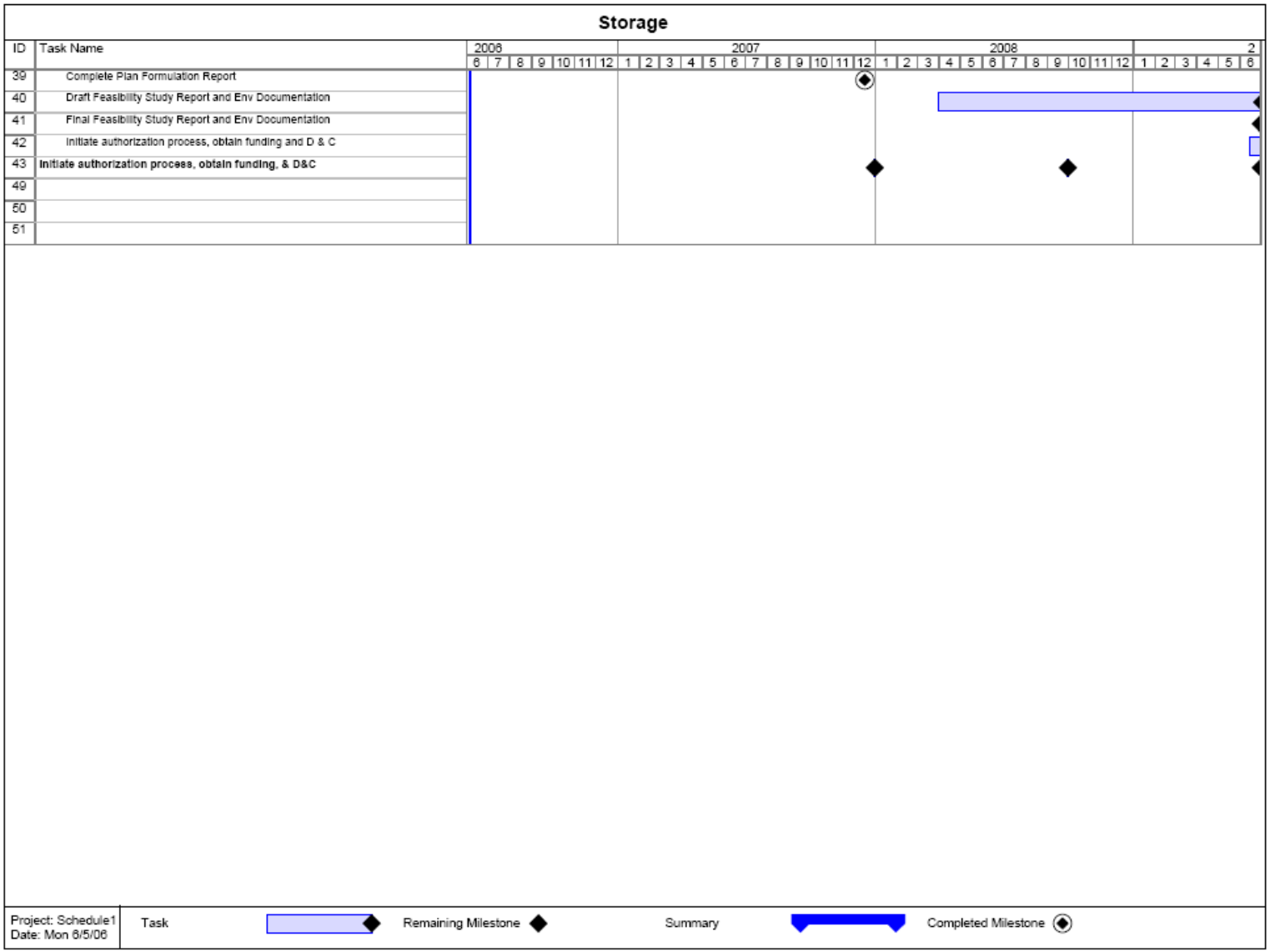


Budget

Surface Storage	
In Delta Storage	$0
Shasta Lake Enlargement	$3.9 million proposed in President's FY 2007 Budget
Los Vaqueros Reservoir Expansion	$2.98 million ($1.98 million proposed in the FY2007 President's Budget for Reclamation)
North-of-the-Delta Offstream Storage	$4.6 million ($1.5 million proposed in the President's FY 2007 Budget for Reclamation)
Upper San Joaquin River Storage	$5.0 million ($4.0 million proposed in the President's FY 2007 Budget for Reclamation)
San Luis Reservoir Low Point Project	$2 million ($800,000 proposed in the FY2007 President's Budget for Reclamation)
Common Assumptions	$2 million ($800,000 proposed in the FY2007 President's Budget for Reclamation)
Groundwater Storage/Conjunctive Management	
Feasibility Study Grants	$0
Technical Assistance to Locals	$6.806 Million
Implementation Grants and Loans	$0


Storage
ID
Task Name
2006
2007
2008
2
6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6
1 Groundwater
2 Local Asst., Feasibility & implemen. Grants & Loans
3 Pursue implementation of additional projects
4 Develop legislation re: Groundwater Management
5 Surface: Shasta Lake Enlargement
6 Planning
7 Complete Initial Alternatives Report (Complete 6/2004)
8 Complete Plan Formulation Report
12/15
9 Draft Feasibility Study report and Env Documentation
11/1
10 Final Feasibility Study Report and Env Documentation
10/31
11 Initiate authorization process, obtain funding, and D&C
12 Surface: North of Delta Offstream Storage (NODOS)
13 Planning
14 Complete Initial Alternatives Report
5/26
15 Complete Plan Formulation Report
8/20
16 Draft Feasibility Study Report and Env Documentation
4/1
17 Final Feasibility Study Report and Env Documentation
9/1
18 Initiate authorization process, obtain funding, and D&C
19 Surface: In-Delta Storage
20 Final Supplemental Feasibility Study Report
21 Surface: Los Vaqueros Reservoir Expansion
22 Planning
23 Completelinitial Alternatives Report (Complete 10/2005)
24 Complete Intial Economic Evaluation Report
25 Draft Feasibility Study Report and Env Documentation
12/31
26 Final Feasibility Study Report and Env Documentation
12/31
27 Initiate authorization process, obtain funding, and D&C
28 Surface: Upper San Joaquin River Storage Invest.
29 Planning
30 Complete Initial Alternatives Report (Complete 9/2005)
31 Complete Plan Formulation report
7/2
32 Draft Feasibility Study Report and Env Documentation
7/30
33 Final Feasibility Study Report and Env documentation
34 Initiate authorization process, obtain funding, and D&C
35 San Luis Reservoir Low Pt Improvement - Planning
36 Planning
37 Complete Federal Appraisal Study (8/2005)
38 Complete Initial Alternatives Report
Project: Schedule1
Date: Mon 6/5/06
Task
Remaining Milestone
Summary
Completed Milestone

Storage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Task Name
2006
2007
2008
2
6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6
39 Complete Plan Formulation Report
40 Draft Feasibility Study Report and Env Documentation
41 Final Feasibility Study Report and Env Documentation
42 Initiate authorization process, obtain funding and D & C
43 Initiate authorization process, obtain funding, & D&C
49
50
51
Project: Schedule1
Date: Mon 6/5/06
Task
Remaining Milestone
Summary
Completed Milestone